```
S1    1002917   S FETAL OR FETUS? OR FOETAL OR FOETUS?
S2     184898   S S1/1991-1996
S3     171046   S S1/1997-2001
S4     246669   S S1/2002-2009
S5     400309   S S1 NOT (S2:S4)
limitall s5
S6     178422   S TISSUE OR CELL OR CELLS OR BLOOD
S7       1969   S DONOR
S8     112857   S UTERO OR VIVO OR INTRAUTER? OR INTRA()UTERIN? OR GESTAT?
S9      17613   S EXTRACT? OR REMOV? OR WITHDRAW? OR HARVEST?
S10     76522   S CULTUR? OR CULTIVAT? OR EXPAND? OR GROWN OR GROWING OR INSERT?
OR VITRO OR ENGINEER? OR EXPRESS?
S11     24392   S TRANSFER? OR IMPLANT? OR REINFUS? OR RETURN? OR ENGRAFT? OR
RE()INFUS?
S12      1634   S S9(S)S11
S13        59   S S12(S)S7
S14       622   S S12(S)S8
S15       388   S S14(S)S6
S16       134   S S14(S)S6(S)S10
S17       192   S S13 OR S16
S18       101   RD  (unique items)
S19       101   S S18 AND S1
S20      6033   S S9(S)S10
```

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S21        105   S S20(S)S7
S22         28   S S21(S)S8
S23         23   S S22 NOT S17
S24         10   RD  (unique items)
S25         10   S S24 AND S1
S26         93   S S21 (S)S6
S27         60   S S26 NOT (S17 OR S23)
S28         60   S S27 AND S1
S29         39   RD  (unique items)
S30     102722   S S1(10N)S6
S31      82883   S S1(5N)S6
S32       6566   S S31(10N)(S7 OR S8)
S33        304   S S32(S)S9
S34       2527   S S9(10N)(S10 OR S11)
S35         58   S S32 AND S34
S36         52   S S35 NOT (S17 OR S23 OR S27)
S37         28   RD  (unique items)
S38         28   S S37 AND S1
```

19/7/12 (Item 12 from file: 155)
Fulltext available through: STIC Full Text Retrieval Options

09454687 **PMID:** 2485121 **Record Identifier:** PMC2565010

Tectal tissue grafted to the midbrain of newborn rats: effect of donor age on the survival, growth and connectivity of transplants.

Majda B T; Harvey A R
Department of Anatomy and Human Biology, University of Western Australia, Nedlands, Perth.
Journal of neural transplantation (ENGLAND) 1989 , 1 (3-4) p95-103 , **ISSN:** 1352-237X--Print **Journal Code:** 9104162
Publishing Model Print
Document type: Comparative Study; Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Other Citation Owner: NLM
Record type: MEDLINE; Completed
Tectal tissue was **removed** from rats at embryonic ages (E) E15, E18, E20 and postnatal day 0 (P0) and grafted onto the midbrain of newborn host rats. Six to 24 weeks after transplantation we examined 1) the growth characteristics of the grafts, 2) their morphology and 3) the pattern of retinal innervation of the grafted tissue. Graft survival was markedly affected by **donor** age. Transplants from E15 and E18 donors showed a survival rate of 90% which decreased to 35% when tissue was taken from E20 animals. Only one graft could be definitively identified in the P0 group. The ultimate volume of the graft was inversely related to **donor** age; grafts taken from E15 donors grew in size and produced the largest grafts, whereas E20 grafts showed a reduction in tissue volume from the time of **implantation**. Host retinal input was found in surviving grafts from all **fetal donor** ages (E15-E20). This input was always restricted to localized areas in the grafts containing high AChE activity; these areas are believed to contain presumptive superior collicular cells from the superficial layers. Thus, in tissue taken from **fetal** rats, it appears that altering the **donor** age does not affect the selectivity with which host retinal axons grow into and innervate specific areas within tectal grafts.

19/7/15 (Item 15 from file: 155)
Fulltext available through: STIC Full Text Retrieval Options
MEDLINE(R)

09259909 **PMID:** 2776826
Interception of the development of self tolerance in fetal lambs.

McCullagh P
Department of Immunology, John Curtin School of Medical Research, Australian National University, Canberra, A.C.T.
European journal of immunology (GERMANY, WEST) Aug 1989 , 19 (8) p1387-92 , **ISSN:** 0014-2980--Print **Journal Code:** 1273201
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Investigation of the nature of immunological self tolerance has usually relied upon experimental protocols in which the tolerant state is interrupted in mature animals with the production of autoimmune disease. While such research has improved the understanding of those processes operative in overt autoimmunity, it has not been informative in relation to events associated with the establishment of self tolerance. Any description of this state which is to be based on observation will necessitate the use of experimental systems that permit observation of animals during the development of self tolerance. The present experiment entailed intervention approximately one third of the way through the gestation period of **fetal** lambs. An earlier experiment had established that 54-day **fetal** lambs would accept allografts of adult skin. This indicated that the capacity to discriminate between self and non-self had not been acquired at that age. **Fetuses** at this stage of gestation were submitted to either partial or total **removal** of the thyroid gland. The excised tissue was then **implanted** in nude mice for periods of 5 to 9 weeks. It was subsequently replaced subcutaneously, either in the original **donor** or in another **fetus** at a comparable stage of gestation. At postmortem examination, several weeks later, self **implants** in lambs from which the thyroid gland had been completely **removed** displayed autoimmune thyroiditis of varying degrees of severity. However, self **implants** in partially thyroidectomized animals were uniformly free from autoimmune manifestations. This implied that these reactions had not been directed against contaminating murine tissues in the **implants** replaced in completely thyroidectomized lambs. All allogeneic **implants** were subject to vey heavy lymphocytic infiltration, usually with accompanying necrosis consistent with allograft rejection. This was taken as an indication that hypothyroid **fetal** lambs had become immunocompetent by the time of thyroid reimplantation. Spontaneous immunological reactivity against reimplanted self thyroid tissue by thyroidectomized lambs was interpreted as a failure to acquire the capacity for self recognition as a result of antigen deprivation.

19/7/20 (Item 20 from file: 155)
Fulltext available through: STIC Full Text Retrieval Options
MEDLINE(R)

08855309 **PMID:** 3044881
The fate of Meckel's cartilage chondrocytes in ocular culture.

Richman J M; Diewert V M
Department of Clinical Dental Sciences, University of British Columbia, Vancouver, Canada.
Developmental biology (UNITED STATES) Sep 1988 , 129 (1) p48-60 , **ISSN:** 0012-1606--Print **Journal Code:** 0372762

Publishing Model Print
Document type: Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Modulation of the chondrocyte phenotype was observed in an organ **culture** system using Meckel's cartilage. First branchial arch cartilage was dissected from **fetal** rats of 16- and 17-day **gestation**. Perichondrium was mechanically **removed**, cartilage was split at the rostral process, and each half was grafted into the anterior chamber of an adult rat eye. The observed pattern of development in nonirradiated specimens was the following: hypertrophy of the rostral process and endochondral-type ossification, fibrous atrophy in the midsection, and mineralization of the malleus and incus. A change in matrix composition of the **implanted** cartilage was demonstrated with immunofluorescence staining for cartilage-specific proteoglycan (CSPG). After 15 days of **culture**, CSPG was found in the auricular process but not in the midsection or rostral process. In order to mark the **implanted cells** and follow their fate, cartilage was labeled in **vitro** with [3H]thymidine [3H]TdR). Immediately after labeling 20% of the chondrocytes contained [3H]TdR. After **culturing** for 5 days, 20% of the chondrocytes were still labeled and 10% of the osteogenic **cells** also contained radioactive label. The labeling index decreased in both **cell** types with increased duration of **culture**. Multinucleated clast-type **cells** did not contain label. Additional cartilages not labeled with [3H]TdR were exposed to between 20000 and 6000 rad of gamma irradiation before ocular **implantation**. Irradiated cartilage did not hypertrophy or form bone but a fibrous region developed in the midsection. **Cells** of the host animal were not induced to form bone around the irradiated cartilage. Our studies suggest that fully differentiated chondrocytes of Meckel's cartilage have the capacity to become osteocytes, osteoblasts, and fibroblasts.

19/7/30 (Item 30 from file: 155)

08454896 **PMID:** 3595475
Augmentation of basal forebrain cell populations with fetal tissue transplants.

Harper J W
Developmental neuroscience (SWITZERLAND) 1987 , 9 (1) p19-32 , **ISSN:** 0378-5866--Print **Journal Code:** 7809375
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
Grafted **fetal** basal forebrain, previously labeled by intraperitoneal injection of gestating female rats with tritiated thymidine, was transplanted into the same area (homotopically) of host animals of various ages. Some animals were serially sacrificed up to 60 days after surgery, while others remained intact for the entire 60-day period prior to sacrifice. Transplants were highly (92%) successful. Early (2-10 days) grafted tissue was mainly composed of a gradient of heavily labeled differentiating cell profiles, strikingly similar to primitive subependymal cells reported elsewhere, which proceeded to mature thereafter. Evidence of cell turnover and tissue continuity at the host-graft interface was also obtained during this time. While many cells bearing label were found at the original **implantation** site in autoradiograms of all experimental animals, some were found in host tissue as early as 5 days following surgery. At later ages, greater numbers of labeled cells were found at considerable distances into host tissue in apparently specific locations. The lateral ventricle overlying the graft site was occupied by **donor** -derived tissue in 40% of all experimental animals. Islands of apparent germinal matrix persisted throughout the duration of the experiment. Results obtained in these experiments with

transplanted tissue accord well with previous studies of neural genesis in intact animals. They further suggest that cell populations of specific nuclei of the host basal forebrain may be selectively augmented by observing critical embryogenetic time constraints when **harvesting fetal donor** tissue.

19/7/68 (Item 4 from file: 5)
Fulltext available through: STIC Full Text Retrieval Options
Biosis Previews(R)

08733937 **Biosis No.:** 198784088086
CHANGES OF TRANSPLANTATION PECULIARITIES OF FETAL LIVER HEMOPOIETIC STEM CELLS AFTER SHORT-TERM CULTURE IN DIFFUSION CHAMBER IN-VIVO

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Author Address: INST RADIATION MED, ACADEMY MILITARY MED SCI, BEIJING**CHINA
Journal: Acta Physiologica Sinica 39 (2): p 107-115 1987
ISSN: 0371-0874
Document Type: Article
Record Type: Abstract
Language: CHINESE

Abstract: Fetal liver **cells** from LACA inbred mice after 6 days of in **vivo culture** were transplanted into a group of syngeneic irradiated adult mice, the seeding efficiency of hemopoietic stem **cells** both in recipient spleen and bone marrow, in comparing with the normal **fetal** liver **cells**, was obviously increased. This effect was completely abolished in allogeneic transplantation of **fetal** liver **cells** from LACA mice into lethally irradiated C57 adult mice. Experimental results showed that ontogenetic and histoincompatible barriers are the major factors determinig the success of allogeneic **fetal** liver transplantation. In **vitro** or in **vivo culture** of **fetal** liver **cells** may create favourable conditions to accelerate the development of hemopoietic stem **cells** from the **fetal** immature stage to adult mature state, and therefore makes them adaptable to lodge in adult bone marrow microenvironment. The short-term in **vivo culture** as reported in this paper showed an effect of transformation of some genetic characters across the ontogenetic barrier but could not overcome the barrier of allogenetic resistance. Hence it is likely that the histoincompatable barrier plays more important role than ontogenetic barrier to ensure the successful **engraftment** in allogenetic **fetal** liver transplantation and the final achievement to this end requires further **removal** of this obstacle.

19/7/77 (Item 13 from file: 5)
Biosis Previews(R)

05627731 **Biosis No.:** 197967016726
ANALYSIS OF N ETHYL-N-NITROSO UREA INDUCED BRAIN CARCINOGENESIS BY SEQUENTIAL CULTURING DURING THE LATENT PERIOD PART 2 MORPHOLOGY OF THE TUMORS INDUCED BY CELL CULTURES

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Author Address: SCH PATHOL, MIDDX HOSP MED SCH, RIDING HOUSE ST, LONDON W1P 7LD, ENGL, UK** UK

Journal: Journal of the National Cancer Institute 61 (2): p 391-398 1978
Document Type: Article
Record Type: Abstract
Language: ENGLISH

Abstract: Pregnant BD IX rats were given i.p. injections of N-ethyl-N-nitrosourea (ENU) or buffer on day 15 or 16 of **gestation**, and **cultures** were prepared from the brains of **fetuses** and offspring at different times after treatment. **Cultured cells** were injected s.c. into syngeneic rats. Some of the **cultures** derived 2, 111-112 and 138-145 days after exposure to carcinogen were tumorigenic. They formed malignant growths which invaded and destroyed surrounding tissues. The neoplasms showed structural differences in various areas: The **cells** were dispersed at random in the wide extracellular space in the center of the tumors, whereas they were arranged in bundles at the periphery. Three groups of **cells** were distinguished: bipolar-fusiform, polygonal-stellate and binucleate-multinucleate. The bipolar-fusiform **cells** could be divided into 2 populations by use of special stains. Glioblasts showed occasional weak staining for glial fibers and collagen-producing **cells**. The polygonal-stellate and binucleate-multinucleate **cells** were all of astrocytic derivation with evidence of glial fiber production. Cellular pleomorphism correlated with the length of time after which the brains were **removed** following ENU treatment. Glial tumors derived from brains **cultured** 2 days after the administration of carcinogen were more pleomorphic than those produced by **cell** lines prepared 111-112 days and 138-145 days after treatment. Cellular pleomorphism decreased with increasing number of **transfer** in tumors from some **cultures** prepared 111-112 days and 138-145 days after injection, but not in those derived 2 days after treatment.

19/7/82 (Item 18 from file: 5)
Biosis Previews(R)

0001653988 **Biosis No.:** 19664700058089
Development of wool follicles and fibers on autoplastic grafts of stored foetal lamb skin

Book Title: Biology of the skin and hair growth
Author: RUDALL. K M; WICKHAM. G A
Author Address: Astbury De. Biophys., Univ. Leeds, Leeds, Engl., UK
p 75-88 1965
Book Publisher: Americal Elsevier Publishing Company, Inc., Canberra, Australia, New York.
Document Type: Book
Record Type: Abstract
Language: Unspecified

Abstract: A technique for studying grafted **fetal** sheep skin was developed. Skin was **removed** from **fetuses** via hysterotomy, stored at sub-zero temperatures until after the birth of the **donor**, and then replaced as an autograft. Grafts of skin, **removed** from **fetuses** 69 to 109 days after conception, expanded rapidly. The time of appearance of fibers at the graft surface suggests that excision and storage usually caused a temporary slowing of development of many follicles with a rapid **return** to their normal rate of development following grafting. The follicle group structure was disorganized in the grafts. Sebaceous glands developed normally but sweat glands were often absent. Ar-rector pili muscles were seldom found in the grafts. Fibers, similar to the sickle fibers of the normal lamb birthcoat, were found in wool samples **removed** from the grafts. This finding suggests that systemic factors peculiar to the **fetus** do not cause the thinning of fibers attributed to a hypothetical pre-natal check which is characteristic of certain early-developing fibers. ABSTRACT AUTHORS: Authors